



# Mad River August Complex Restoration Project

## Scoping Period Summary, June 2021

US Forest Service photo by Jeremy Marshall.

### *Scoping Process*

The National Environmental Policy Act of 1969 (NEPA) guides the Forest Service decision-making process and provides opportunities for citizens to share ideas and comments on proposed public land resource management projects, prior to a federal decision.

The SRNF is initiating the 30-day Scoping Period for the *Mad River August Complex Restoration Project* (hereafter referred to as the *August Complex Restoration Project*) from **June 25 to July 26, 2021**, so you may be heard. This project is subject to the pre-decisional administrative review (objection) process pursuant to 36 CFR 218, Subparts A and B. Only those who submit timely and project-specific written comments during either this designated Scoping Period or the upcoming public comment period on the draft environmental assessment (EA) will be eligible to file a subsequent objection on the draft decision notice, planned for this fall.

For more information, contact Kristen Lark at (707) 382-8427 or [kristen.lark@usda.gov](mailto:kristen.lark@usda.gov) with a subject line of *August Complex Restoration Project* or visit [www.fs.usda.gov/project/?project=60286](http://www.fs.usda.gov/project/?project=60286).

Scoping comments must be postmarked by July 26 and may be 1) mailed to or hand delivered between 8 a.m. and 4:30 p.m. weekdays to the Mad River Ranger District, 741 Highway 36, Bridgeville, CA 95526; 2) faxed to (707) 574-6273; or 3) emailed to [carol.spinos@usda.gov](mailto:carol.spinos@usda.gov). Please make sure that *August Complex Restoration Project* is in the subject line of your email.

### *Background*

In mid-August 2020, several rounds of dry thunderstorms tracked across the region during extreme heat and two distinct anomalous wind events. Over 6,000 cloud-to-ground lightning strikes were recorded in California, including 1,463 strikes across interior northern California. These lightning strikes started hundreds of wildfires burning over one million acres across the Mendocino, Shasta-Trinity and Six Rivers

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national forests. On September 11, 2020, the fires known as the Elkhorn, Hopkins, Willow, Vinegar, as well as the existing August Complex burned together and became collectively known as the August Complex.

### *Project Location*

The project area is near Three Forks, Berry Creek, Kettenpom and Hettenshaw Valleys, and populated areas near Ruth, Long Ridge, Haman Ridge, and Hoaglin Valley in CA. The legal description is T2S R6E Sections 10, 20-21, 23-24, 28-29, 33-36; T2S R7E Sections 8-13, 17, 21-22, 24-28, 30-33, 35; T2S R8E Sections 6-7, 18-21, 30-33; T3S R6E Sections 2-5, 11, 13-14, 25; T3S R7E Sections 1--8, 10-17, 19-22, 24-25, 29-33; 35; T3S R8E Sections 4-5, 7-9, 16-17, 19-21, 29-33; T4S R7E Sections 2, 5-8, 10-15, 17, 21-28, 33-34; T4S R8E Sections 4-5, 8-9, 19-20; T5S R7E Sections 3, 10-15; Humboldt Meridian. T28N R12W Sections 28-34; T27N R12W Sections 1-36; T27N R11W Sections 7, 18-20, 29-32; T26N R12W Sections 1-5, 8-17, 22-24; T26N R11W Sections 5-7, 18-19; Mount Diablo Meridian.

### *Proposed Treatment Description*

In response to the August Complex that burned 156,153 acres on the Mad River Ranger District of the Six Rivers National Forest (SRNF), the USDA Forest Service (Forest Service) is proposing the *August Complex Restoration Project* on National Forest System (NFS) lands as described below.

#### **Oak Woodland Restoration**

564 acres of oak stands presently degraded by conifer encroachment would involve removing live conifer trees up to 12-inch diameter-at-breast height (dbh) and understory vegetation contributing to hazardous fuel loading using masticators and hand tools. Downed fuels would be managed using lop and scatter, mechanical chipping, and mastication on slopes less than 35 percent. Additional activities would include hand piling, tractor piling and burning. Occasionally and infrequently, conifers shading or overtopping large healthy oaks—defined as those generally greater than 12-inch dbh, having less than 10-degree lean and at least a 25 percent live crown—would be girdled and left in place. No predominant conifer trees would be cut or girdled. Predominant trees generally predate the age of existing stands, are larger in diameter than codominant and dominant trees, and have crowns that have grown above the general levels of upper canopies. Forest litter (e.g., small limbs and fallen tree tops) and understory vegetation such as live/dead brush and small trees (saplings and poles up to 12-inch dbh) contributing to hazardous fuel loading would be reduced using masticators, manually lopped and scattered, or mechanically chipped. Additional activities would involve hand piling and burning, tractor piling and burning, and removal of material for biomass utilization for community fuelwood gathering.

#### **Fuels Reduction and Timber Salvage**

These treatments involve a combination of area and linear commercial and non-commercial methods. The treatment prescription is the same for area and linear commercial methods. The distinction between them is their unique objective. Linear fuels reduction corridors are strategically located along roads targeting safety and to serve as containment/control lines for firefighters during the next wildfire event. Area-based treatments target economic recovery of timber salvage and clearing post-fire debris and fuels reduction in preparation of planting and to lower risk of high-severity re-burn of seedlings.

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### **Fuels Reduction Corridors (linear)**

8,779 acres of linear fuels reduction corridors with 6,852 acres involving non-commercial fuels reduction treatments and 1,927 acres of commercial timber salvage treatments, as follows:

- In high-severity stands (75 percent or greater basal area lost) conifers that meet 70 percent or greater probability of mortality as determined by *2011 Region 5 Fire-Injured Marking Guidelines* and hazard trees would be removed within a 400-foot-wide strip (250 feet above and 150 feet below roads) along select Trinity County and NFS roads (also known as system roads). These areas include roads that are open for public access and those required to transport logs (i.e., haul roads) and other high value resource areas.
- Up to 28 miles of county roads and priority NFS roads would have non-commercial fuels treatment of all live and dead trees less than 12-inch dbh and at least 4-inch; brush would also be removed. Non-commercial dead trees up to 12- to 14-inch would also be removed (depending on location and condition of the snags) for hazardous fuels treatment; the upper limit would vary depending on local site conditions.
- Along a portion of the fuels reduction corridor roads described above, timber salvage would involve manually or mechanically felling and commercially harvesting dead and dying conifers that would have a 70 percent or greater probability of mortality and are 10-inch dbh or greater. This would occur on NFS lands along up to 10 miles of county roads (approximately 600 acres) and up to 44 miles of NFS roads. No commercial treatments would occur within an half-mile radius of established northern spotted owl (NSO) activity centers (AC), within 0.25 miles from suitable (nesting, roosting, or foraging) habitat and within 500 feet of post-fire foraging (PFF) habitat. PFF habitat is defined as previously suitable NSO habitat that burned and is no longer classified as suitable habitat, but potentially may provide foraging opportunities. Non-commercial fuels activities within NSO ACs would include cutting of conifers primarily up to 12-inch dbh and understory vegetation contributing to hazardous fuel loading. Downed fuels would be managed using lop and scatter, chipping, mastication on ground 35 percent slope and less, hand piling and burning, tractor piling and burning, and removal of material for biomass utilization for community uses. Treatment of non-commercial fuels within 0.5 miles of NSO ACs and PFFs would be allowed but would require limited operating period (LOP) restrictions.
- Chainsaws and/or mechanical harvesters (i.e., ground-based, tracked and/or rubber-tired equipment) would be used to fell the trees. The majority of mechanically felled commercial-sized trees would be whole-tree yarded and limbed, topped, and bucked into log segments at designated landings. The remaining limbs and tops would be machine-piled and covered for future burning at landing sites. Trees greater than 20-inch dbh would be hand-felled, bucked into log segments and yarded to designated landings. Limbs and tops would be left on the ground and lopped and scattered to 18-inch depth. Additional construction of new landings would only be created if existing landings are not present. New temporary road construction would be needed.

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### **Fuels Reduction Salvage (area-based)**

- 2,578 acres of salvage on NFS lands burned at high severity (where not included as part of the fuels reduction corridor). This treatment includes up to 2,082 acres classified as matrix, 216 acres as late-successional reserve (LSR), 130 acres as Retention and 150 acres as Partial Retention of management areas as defined in the *Six Rivers Land and Resource Management Plan* (SRNF Forest Plan). These would be on broader areas of the landscape that provide for opportunities of reforesting strategic areas and other special habitats, such as within LSRs or high severity burned NSO suitable habitat. These are places featuring gentler slopes, such as ridgetops and other locations with existing road access. Chainsaws and/or mechanical harvesters (i.e., ground-based, tracked and/or rubber-tired equipment) would be used to fell the trees on slopes less than 35 percent. The majority of mechanically felled commercial-sized trees would be whole-tree yarded and limbed, topped, and bucked into log segments at designated landings. The remaining limbs and tops would be machine-piled and covered for future burning at landing sites. Trees greater than 20-inch dbh would be hand-felled, bucked and yarded to designated landings. Limbs and tops would be left on the ground and lopped and scattered to 18-inch depth.
- Salvage occurring within the project area would occur within four land management areas: Matrix, LSR, Partial Retention and Retention. The SRNF Forest Plan states that “salvage shall be a priority in matrix lands under certain conditions.” Salvage is allowed within LSRs. Existing stands must have less than 40 percent canopy. Live trees would not be felled unless they present a hazard per Operational Safety and Health Administration (OSHA) provisions. Salvage within Retention and Partial Retention would be to provide for safety and for site preparation to reforest high severity areas that lack seed sources for natural regeneration.

### **Development of Radio Repeater Site**

A new radio communication building and antenna monopole would be installed on Grizzly Peak, replacing the Kettenpom site damaged by the August Complex. An 8-foot by 8-foot Pepro building with a 30-foot monopole would be installed. The Pepro building is essentially a Faraday Cage, providing excellent protection to the radio equipment from lightning strikes. With this type of building there would be no need for a poured concrete foundation. The building would be supported by adjustable support legs mounted to the corners. The legs would attach to pre-formed cement pads that rest on the ground, providing footing and grounding requirements for the building. The building would be delivered by truck and trailer on an existing temporary road, improved as part of 2020 fire suppression activities considered suitable for use by high-clearance vehicles, to a staging location and then placed at the radio site with a “telehandler.”

### **Reforestation**

2,500 acres of mixed conifer species (primarily Douglas-fir and ponderosa pine, with smaller amounts of white fir, incense cedar and sugar pine) would be planted within designated Special Habitats (including LSRs) and deficit NSO core areas. Planting would occur where there is road access and sufficient site (soil) productivity and moisture is present to support survival of tree seedlings. The mix of species and inter-tree spacing would reflect the range of conditions characteristic of recent, historic vegetation patterns and disturbance regimes in the project area (SRNF Forest Plan VI-74). Planting would achieve



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stocking levels to ensure the establishment of a successful stand that can later be thinned to desired stocking to achieve management objectives. For instance, planting along fuel corridors would act to “grow” shade to establish desired fuels corridor conditions in the future. Initial stocking would be approximately 200 trees per acre (TPA). Final stocking levels would vary, ranging from 40 to 50 TPA, with higher TPA to achieve re-establishing Special Habitats (LSR) and late-successional forests in NSO core areas. Final recommended ranges for LSRs, as described within the *Late Successional Reserve Assessment*, would be a minimum of 75 trees per acre, but in general would vary between 100 to 125 trees per acre. The planting pattern across all planning areas would be to minimize row planting as much as possible and encourage varied spacing, based on local site conditions. The distribution of planted tree species would depend on topography, elevation, soil type and micro-site conditions.

Fuels reduction within NSO ACs would involve manually cutting pole-size trees (with no commercial salvage value) and sprouting understory brush contributing to hazardous fuel loading. Concentrations of downed fuels composed of forest litter (fallen tree stems, limbs, and broken treetops) would be reduced using lop and scatter, chipping, mastication, hand piling and burning, tractor piling and burning, and removal of material for biomass utilization or community fuelwood gathering.

Treatments to provide the best opportunity for the initial successful establishment and growth of planted trees and later provide increased resiliency for saplings and younger trees for the introduction of fire would include thinning, grubbing, and release. This would ensure that proposed plantations did not add a hazardous fuels component to the landscape. Prior to planting, scalping would be an 8-foot radius from the planted seedling. This would be followed up one year and three years from initial planting by hand grubbing and removing all live brush species growing within 10 feet of live planted conifer seedlings. About 10 to 15 years after initial planting, thinning the stand would occur to reduce stocking density, along with pruning the bole of live trees up to 6 feet to 8 feet or leaving at least 50 percent live crown, to reduce ladder fuel effects (within fuels reduction corridors). Later treatments would include favoring sprouting hardwood tree species where appropriate, thinning saplings and young conifers when necessary to maintain tree vigor and growth and the introduction of understory burning. Fuels treatments associated with thinning and release operations would include lop and scatter, hand pile and burning, and mastication around leave trees to reduce hazardous fuels and suppress brush response.

### **Invasive Plant Management**

465 acres of invasive plant treatment would involve treating them to limit their spread by either hand removal, mulching, or avoidance. Hand removed non-native invasive plants would be either removed from the project area or hand piled for subsequent burning. The aim of this treatment is to eradicate invasive plants where feasible, control and containment of populations to reduce their disruptive nature on native plant populations. The treatment strategy would consider the population size and distribution and the feasibility of successful control.

The desired condition, described in *Region 5 Ecological Restoration Leadership Intent* (2015 USDA, Pacific Southwest Region, R5-MR-048) is to decrease the impacts of invasive species through preventative practices, rapid response control, management, rehabilitation and restoration, emphasizing cooperative work with federal, state, and community partners. The SRNF has adopted *Best Management*

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*Practices* (BMP; SRNF 2014) as standard operating procedures for all forest management activities and across all program areas to reduce or eliminate the risk of invasive plant species introduction and spread.

### **Hazard Tree Removal**

Hazard trees with the potential to cause human injury or harm located adjacent and within treatment areas, and select public recreational campgrounds, trailheads and trails would be treated in accordance with *Hazard Tree Guidelines for Forest Service Facilities and Roads in the Pacific Southwest Region* (R5 Hazard Tree Guidelines; Angwin et al. 2012; Report RO-12-01) and addendums *Defining the Hazard Tree Failure Zone* (2020) and the *Streamlined Approach to Hazard Tree Abatement after Catastrophic Events* (2020). Designated hazard trees would be designated using the *Marking Guidelines for Fire-Injured Trees in California* (Smith and Cluck 2011; Report #RO-11-01). Some hazard trees may be left on-site, sold commercially, or made available for personal firewood. Within salvage and fuels reduction corridors treatment areas, the treatment of hazards trees would be addressed by the *2011 Region 5 Fire-Injured Marking Guidelines*.